

REMARKS

Claims 1 to 3, 6 to 14, 16, 17, 19 to 27, and 34 are pending. Claims 4, 5, 15, 18, and 28 to 33 are canceled. Claims 1 and 2 are currently amended.

Reconsideration of the application, as amended, is requested.

Support for the amendments to claims 1 and 2 can be found, for example, in Figures 1a and 2, each of which show a surface of the fibrous web layer 11 in continuous contact with the thermoplastic web layer 13. Support for the amendment to claim 1 and claim 2, with regard to the fibrous web layer comprising one or more nonwoven materials, can be found, for example, in original claim 5.

Interview Summary

The undersigned acknowledges with appreciation the telephone interview granted by the examiner on May 6, 2008, during which the examiner explained how he was applying the cited references. Potential amendments, involving the non-precompressed nature of Applicants' fibrous web layer and the biaxial stretching in some embodiments, were discussed.

§ 103 Rejections

Claims 1, 3, 5 to 26 and 34 are rejected under 35 USC § 103(a) as being unpatentable over Buzzell et al. (US Pat. 6,582,642) when taken with Kennedy et al. (US Pat. 5,260,015 and further in view of any of Wood et al. (US Pat. 6,668,435) or Ito et al. (US Pat. 6,955,847) or Kronzer (US Pat 5,66,155).

Insofar as the rejection is applied to amended claim 1, it is respectfully traversed. Applicants claim in amended independent claim 1 a method of manufacturing a stretched mechanical fastening web laminate. The stretched mechanical web laminate comprises a thermoplastic web layer having two major surfaces, one of the major surfaces bearing a multitude of male fastening elements suitable for engagement with a corresponding female fastening material, and on its other major surface a fibrous web layer. The method comprises steps (i), (ii), and (iii), wherein step (ii) comprises introducing a molten thermoplastic resin into the cavities in excess of an amount that would fill the cavities which excess forms the thermoplastic web layer, wherein a surface of the fibrous web layer is in continuous contact with the thermoplastic web layer. Step (iii) comprises stretching the precursor web laminate monoaxially or biaxially thereby decreasing the basis weight of the fibrous web layer and the thickness of the thermoplastic web layer from their respective initial values to provide a stretched mechanical fastening laminate having a basis weight of less than 100 g/m².

Buzzell et al. does not teach a method of making a stretched laminate having each of the elements as claimed in amended claim 1. For example, Buzzell et al. does not teach a method wherein a surface of the nonwoven fabric is in continuous contact with the thermoplastic web layer. Buzzell et al. teaches a method of making a laminate of a knitted loop material and a thermoplastic resin involving precompressing the loop material (see col. 14, ln. 60 to col. 15, ln. 27 of U.S. Pat. No. 6,582,642) before stretching the laminate widthwise. Microcreping is given as a process that may be used to precompress the loop material. The precompressing or microcreping process results in intermittent bonding, or discontinuous contact, of the knitted loop material to the thermoplastic web layer and allows the knitted loop material to return to its normal configuration after stretching.

Buzzell et al. states (col. 15, lns. 23-27) that the process of making a stretched laminate of a knitted loop material and thermoplastic resin will produce a product having touch fastener

hooks on one side and touch fastener loops on the other side. Modifying the method of Buzzell et al., by using a nonwoven fabric, wherein a surface of the nonwoven fabric is in continuous contact with the thermoplastic web layer, as claimed in amended claim 1, would destroy the loop function of the material, rendering the laminate inoperative for its intended purpose. Evidence supporting this position is found in Kennedy et al., which is incorporated into Buzzell et al. by reference. For example, Figs. 5 and 5a and the corresponding description (col. 5, ln. 50 to col. 6, ln. 14) of Kennedy et al., discloses the lamination of a nonwoven to a thermoplastic. Fig. 5a demonstrates that a nonwoven can be completely surrounded by thermoplastic when a surface of the nonwoven is in continuous contact with the thermoplastic during the lamination (i.e., when the nonwoven is non-precompressed). The nonwoven would be completely nonfunctional as a loop. Only when the nonwoven is thick and dense will the plastic marginally penetrate into the nonwoven (col. 6, ln. 3-5), but even with a thick and dense nonwoven material, it is not clear from the disclosure of Kennedy et al. that the embodiment shown in Fig. 5 would function as a loop material. And use of thick and dense nonwoven is antithetical to Applicants' methods, in which it is required that a stretched laminate have a basis weight of less than 100 g/m².

So, maintaining the loop structure of the fabric of Buzzell et al. is critical and would be compromised if a non-precompressed nonwoven fabric were continuously laminated to a thermoplastic web layer as shown in Kennedy et al. But Applicants' method, in which a surface of the nonwoven fabric is in continuous contact with the thermoplastic web layer, typically results in a laminate in which the fibrous material is no longer a functional loop after the stretching step. See, for example, p. 23, lns. 7 to 20, which describes Applicants' laminate in use as a back sheet of a sanitary napkin. The nonwoven material is not exposed and therefore not intended to be used as a functional loop.

None of Wood et al., Itou et al., Kronzer, or Kennedy et al. overcomes the deficiencies of Buzzell et al. The Office Action (page 7, line 1) points to the secondary references as providing processes other than microcreping to be used in combination with Buzzell et al. But the secondary references do not give any hint how a non-precompressed nonwoven fabric could be used to provide a functional loop in the embodiment of Buzzell et al. shown in Fig. 13. In fact, Itou et al. emphasizes the importance of intermittent bonding of a nonwoven material when the material is intended to be used as a loop (col. 5, lns. 23-29).

In view of these remarks, the rejection of claim 1 under 35 USC § 103(a) as being unpatentable over Buzzell et al. (US Pat. 6,582,642) when taken with Kennedy et al. (US Pat. 5,260,015 and further in view of any of Wood et al. (US Pat. 6,668,435) or Itou et al. (US Pat. 6,955,847) or Kronzer (US Pat 5,66,155) has been overcome and should be withdrawn.

Claims 3, 6 to 14, 16, 17, 19 to 26, and 34 each depend directly or indirectly from claim 1. Claim 1 is patentable at least for the reasons given above. Thus, claims 3, 6 to 14, 16, 17, 19 to 26, and 34 are likewise patentable.

In summary, the rejection of claims 1, 3, 6 to 14, 16, 17, 19 to 26, and 34 under 35 USC § 103(a) as being unpatentable over Buzzell et al. (US Pat. 6,582,642) when taken with Kennedy et al. (US Pat. 5,260,015 and further in view of any of Wood et al. (US Pat. 6,668,435) or Itou et al. (US Pat. 6,955,847) or Kronzer (US Pat 5,66,155) has been overcome and should be withdrawn.

Claim 27 is rejected under 35 USC § 103(a) as being unpatentable over Buzzell et al. (US Pat. 6,582,642) when taken with Kennedy et al. (US Pat. 5,260,015) and further in view of any of Wood et al. (US Pat. 6,668,435 or Itou et al. (US Pat. 6,955,847) or Kronzer (US Pat 5,66,155), as applied to claims 1, 3 and 5-26 above, and further in view of de Navas Albareda (US Pat. 4,056,593).

The disclosure of de Navas Albareda does not correct the deficiencies of Buzzell et al. described above with respect to the critical teaching of a precompressed fabric laminated to a thermoplastic resin. The rejection of claim 27 under 35 USC § 103(a) as being unpatentable over Buzzell et al. (US Pat. 6,582,642) when taken with Kennedy et al. (US Pat. 5,260,015) and further in view of any of Wood et al. (US Pat. 6,668,435 or Itou et al. (US Pat. 6,955,847) or Kronzer (US Pat 5,66,155), as applied to claims 1, 3 and 5-26 above, and further in view of de Navas Albareda (US Pat. 4,056,593) has been overcome and should be withdrawn.

Claim 2 is rejected under 35 USC § 103(a) as being unpatentable over Buzzell et al. (US Pat. 6,582,642) when taken with Kennedy et al. (US Pat. 5,260,015) in view of any of Wood et al. (US Pat. 6,668,435 or Itou et al. (US Pat. 6,955,847) or Kronzer (US Pat 5,66,155), and in view of Navas Albareda (US Pat. 4,056,593).

The disclosure of de Navas Albareda does not correct the deficiencies of Buzzell et al. described above with respect to the critical teaching of a precompressed fabric laminated to a thermoplastic resin. The rejection of claim 2 under 35 USC § 103(a) as being unpatentable over Buzzell et al. when taken with Kennedy et al. and further in view of any of Wood et al. or Itou et al. or Kronzer and in view of de Navas Albareda has been overcome and should be withdrawn.

In view of the above, it is submitted that the application is in condition for allowance.
Examination and reconsideration of the application, as amended, is requested.

Respectfully submitted,

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